

## GAS CONVERSION SYSTEM

### ABSTRACT OF THE DISCLOSURE

A gas conversion system for removing carbon dioxide from gases includes a duct through which gases are circulated. The duct has a port for introducing a reaction agent into the duct to the gases. An electron beam emitter is positioned relative to the duct for directing an electron beam into the duct to cause components of the carbon dioxide and the reaction agent to react to remove carbon dioxide from the gases and release oxygen.